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## Discussion

**Dr Nawwar Al-Attar** (*Paris, France*). In the conclusion of your talk you described a faster implantation time, but when you showed us the crossclamping times, they had an average of 71 minutes. Does this compare favorably with what you do with conventional AVR or do you really see a gain in time?

**Dr Breitenbach.** If you had a closer look at our results, you would see that we performed concomitant coronary artery bypass grafting in 6 patients; this explains the higher crossclamping time.

**Dr Al-Attar.** What would be the average crossclamping time then of a standard conventional AVR versus your new technique, this new valve?

**Dr Breitenbach.** I think conventional AVR crossclamping time ranges from 40 to 50 minutes, depending on the experience of the surgeon. With this new technique, we could reduce the crossclamping time by 10 to 15 minutes.

**Dr Al-Attar.** Crossclamping time?

**Dr Breitenbach.** Yes, crossclamping time.

**Dr Bryan Fitch Meyers** (*St Louis, Mo*). I am always interested in the downstream consequences of these novel techniques, and you had to remove 2 of these valves, but you did them immediately, apparently, in the same operation. Do you have any experience on what it would be like to remove one of these valves after it is fully healed in or does that change the nature of a redo operation based on the securing system that is involved?

**Dr Breitenbach.** It was very easy to explant this valve because the TACs could be easily removed without any difficulties by using a forceps and you don't need to cut and remove any kind of knotted sutures as in conventional AVR.

**Dr Meyers.** With an immediate removal, but once it is healed in, have you removed any 3 or 6 months later?

**Dr Breitenbach.** We had to remove 1 valve because of endocarditis at 22 months, and we did that without any difficulties.

**Dr Wolfgang Harringer** (*Braunschweig, Germany*). I have been the principal investigator of this multicenter trial. Just a brief comment on the last question. The animal studies in which we performed chronic implantation and removal of the valve demonstrated that it is extremely easy to take the valve out because there is a clear dissection plane.